

HEADQUARTERS MISSISSIPPI WING
CIVIL AIR PATROL
1635 AIRPORT DRIVE
JACKSON, MS. 39209

5 January 2004

COMMUNICATIONS

WING REPEATER PLAN

REF; CAPR 100-1, Volume 1

1. **PURPOSE:** To implement a statewide network of CAP repeaters in the Mississippi Wing. This document is intended to be a guide for planning and coordination, not only within the wing, but also with the adjoining wings and regions.
2. **SCOPE:** The Civil Air Patrol standards and requirements in CAPR 100-1 are highly desirable but equipment, service, and personnel availability may severely restrict the implementation of this plan.
3. **GENERAL INFORMATION:** At this time wing and Air Force funding for communications is limited. In view of these realities the only practical way for this wing to implement a good repeater plan is for the squadrons and individuals to recruit dedicated technicians and/or amateur radio operators to plan for and operate a repeater for their area. A search for good repeater sites is one of the first steps.
4. **COVERAGE PLAN:** To effectively service the state an array of at least 11 fixed sites would be required. This quantity was originally based on the Mississippi Educational Television System (ETV). Tower system. This would allow most of the state to be within range from a base station. This would have served our units well for most needs.

Part of this plan are two suitcase portable repeaters which could operate from an aircraft as an "high bird", one for each of our repeater pairs. They could also be used for mission and training use where a repeater is not within easy range. They could also replace a fixed repeater until it could be repaired.

Due to radio propagation and adjacent states having repeaters, interference will occur at times. At all times the minimum antenna height and transmitter power will be used to service the required area. The use of CTCSS tone encoding will always be used.

5. **TECHNICAL CONSIDERATIONS:** All repeaters will have the capability of decoding 2 tones, one being the tone for that area, and the other 100 HZ for mobiles and handhelds. A list of all the sub-audible CTCSS tones is listed in CAPR 100-1 volume I, page 22.
6. The following is a list of locations identified, local CTCSS tone required, frequency pair programmed, status to date for that location and counties covered.

NOTE: A particular repeater, due to many factors, may cover not all of a county listed.

LOCATION	TONE	FREQ. PAIR	STATUS	COUNTIES COVERED
Meridian/Decatur	74.4	Primary	Operational	Newton, Lauderdale, Jasper, Scott Need better repeater site.
Columbus	79.7	Primary	Requirement identified	Need location, repeater, and Installation funding.
Jackson	85.4	Primary	Operational	Hinds, Rankin, Scott, Copiah, Madison, Leake, Smith
Greenville	91.5	Primary	Location identified	Awaiting repeater and Installation funding
Starkville/Ackerman	110.9	Primary	Off Air	Okitbbeh, Lowndes, Clay, Webster, Choctaw, Attala, Winston, Noxubee, Monroe, Chickasaw, Calhoun, Granada, Awaiting repeater rebuild.
Oxford	118.8	Primary	Operational	Lafayette, Yalobusha, Panola Marshall
Biloxi/Gulfport	127.3	Primary	Operational	Harrison, Jackson, Hancock
Hattiesburg	146.2	Primary	Location Identified	Awaiting installation funding, have repeater.
Saltillo/Tupelo	156.7	Secondary	Operational	Lee, Prentiss, Itawambe, Pontotoc, Tippah, Monroe, Chickasaw, Lee, Union
McComb		Secondary	Requirement Identified	Need site, repeater, and installation funding.
Pascagoula/Moss Point		Secondary	Requirement identified	Need site, repeater, and installation Funding
Stennis/Diamondhead		Secondary	Requirement identified	Need site, repeater, and installation funding.

7. PLANNING: The planning and installation of a repeater must be coordinated through the wing communications staff. The Southeast Region Repeater Committee member from Mississippi is;
Capt. Robert Groves MB-8 Engineering Officer

Careful planning and coordination with the surrounding wings and regions is essential to head off interference and operational problems.

8. COMMAND: This plan supercedes all previous wing repeater plans issued by the Mississippi Wing and is effective 10 January 2004.

FOR THE COMMANDER

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ROBERT E. KILROY
LTC CAP
DIRECTOR OF COMMUNICATIONS